FANTASY SMITH'S NOTEBOOK
EARTHLINGS
HUMAN

AN OUNCE OF PREPARATION IS WORTH A TON OF PAINT

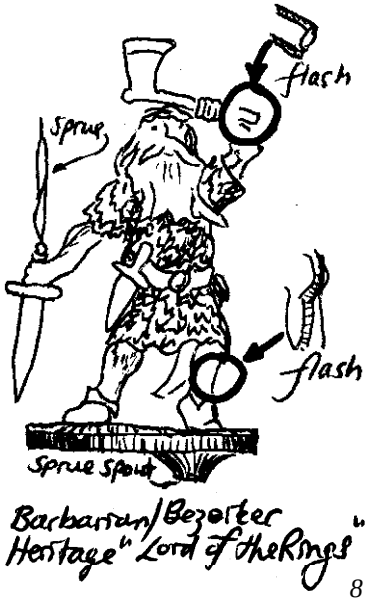
You don't need a lot of specialized tools or super talent to create beautiful miniature figures—just patience and preparation before painting.

Once you have purchased figures, they need to be prepared for painting. This process is very important even though it is often overlooked or not completed. The most important part of painting is actually not the paint itself, but the preparation. Preparation will make the difference between an obviously superior job and a mediocre one. The painting only emphasizes this difference.

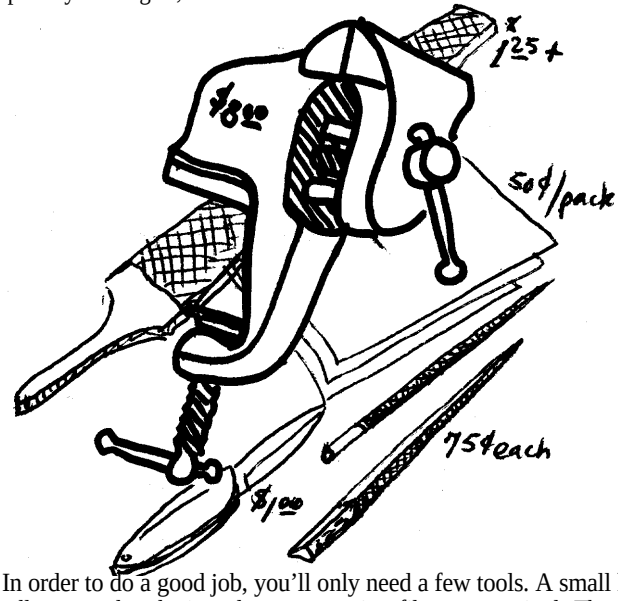
Patience is always the chief skill of a miniaturist. Whenever you're in a hurry, you can expect to have difficulty in doing a good job on the more complex figures. To finish off figures quickly, choose some that are basic, without a lot of detail in the casting. Minifigs and AIRFIX produce these types of figures: extremely clean and simple. On the other hand, these figures do not have much interest to the more advanced modeler who wants more detail. A rule of thumb to remember before starting is: the more detail in the casting, the more difficulty will be encountered in preparing it for painting, but the better a well done job will look.

You have to start by cleaning off all the marks left by the mold. Even the best castings have marks left on them by molds. The most common mold marks are called "flash". Flash results when metal oozes into the tiny space between mold halves. Larger bits of material that remain from the casting process are "sprue". There are impressions from the pouring holes or air outlets that are part of the mold. Both types of casting marks are illustrated here.

Flash and sprue have to be cut, scraped, or filed off before painting can begin. This process is illustrated by means of a series of diagrams. As a demonstration piece, the "bard" figure from Ral Partha will be illustrated. It is a kneeling harpist of moderate complexity, and an interesting. figure in its own right



A word of caution is valuable before you begin. Safety is always important. Be especially careful of your fingers while working. It's relatively easy to cut or jab yourself with a knife or file, especially if you're tired or if the work is not supported properly. A small vise will be extremely useful. If you use one, be careful not to damage the casting by clamping anywhere other than the base. The metal is soft, and will crush and deform. If you don't use a vise, use a table or bench forsupport whenever possible. This will not only lessen fatigue and "modeler's cramp" in your fingers, but will be safer and allow better work as well.



In order to do a good job, you'll only need a few tools. A small knife as well as round and triangular cross section files are required. These are available from X-ACTO, but any other manufacturer's tools will do. A small pen knife, for example, can easily be substituted for the commonly used X-ACTO knife. A small vise, a normal sized wood file, and a few sheets of coarse sandpaper will also come in handy and speed the work. These tools are illustrated with approximate costs indicated. You may

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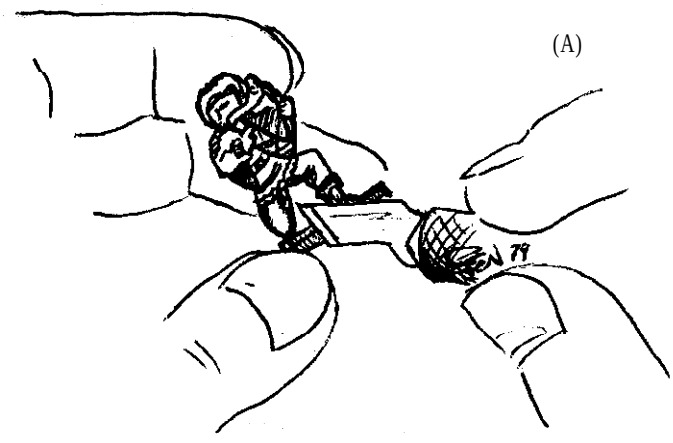
not have to buy them, since most workshops already are equipped with them.

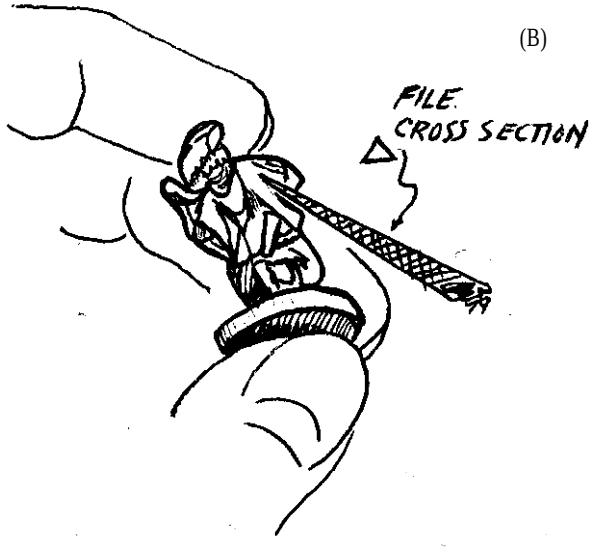
Cut the most obvious flash off first with knife. Start with the base of the figure and work upwards. First trim off the sprue that normally makes a lump on the bottom surface. Then use the large file or rough sandpaper to even off the base to the exact position you want before beginning other areas. When you use the file, it's best to clamp the figure in a vise rather than trying to hold it in your hands.

The reason for starting at the base and then working up is to provide an easy method of tracking what you've done, and what still needs to be done. Also, if you do higher sections first, you may spoil them by later work on the base. After finishing underside of the base, go up the rest of the figure with the knife as shown in illustration "A".



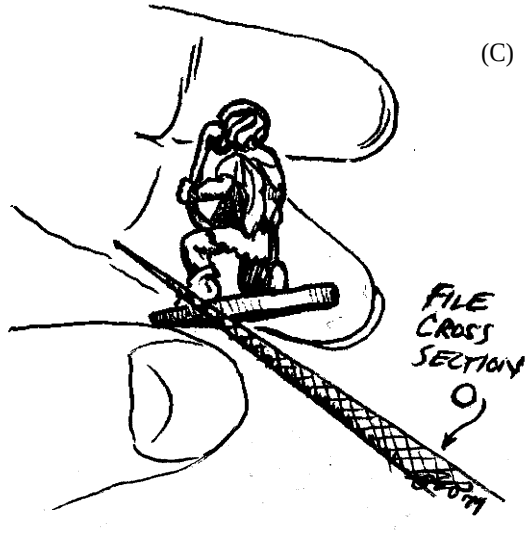
(A)

Many miniature modelers stop here, but work with files is required for a superior job. It's difficult to get into all the corners with a knife, and knives tend to leave rough edges or wavy surfaces that will need to be filed. Major filing is easiest with the triangular cross section file. The tip of a triangular file will fit into recessed areas nicely. This file is also the best one to flatten or shape the forms of leathery wings, belts, sheaths, edged weapons, and capes. This is shown in illustration "B".



(B)

After removal of rough edges and shaping is finished, a bit of work with the round cross section ("rat tail") file can complete the shaping. This file is best for rounded areas of the casting-legs, arms, shield bosses, and spiked tails. Often, even facial features are a bit bubbly or knobby. The tip of the rat tail file does a good job of smoothing these fine areas illustrated. After inspecting your work, you can progress to the next stage.



(C)

As an important step before painting, it's good to cover the entire figure with a thin coat of metal primer or undercoat This will allow color to stick to the metal better, and will also point up any roughness or unnoticed flash before you begin to paint. Imperfections really show up well when coated with undercoater. The shine that always accompanies metal is dampened, and light and shadow are no longer affected by it-finally you can get a true idea of how the figure looks. After the first coat has been applied and correction made, a second coat will allow colors to be unusually brilliant, and cover up any work just completed.

Fantasy figures in 25mm scale are less than one inch high. Any finger marks left will be relatively large, so your wet paint can be botched badly by handling. Not only that, it gets very tiring to hold such a small figure perfectly still for a long time. If you glue the figure on a "handle", painting will be much easier. You can control the figure better, and will never smudge the figure with your fingers. Many modelers like to put their figures on a small piece of wood scrap or dowel. This is fine, but requires a place to stand the dowel or scrap up when the figure is drying. This could be a problem. A piece of folded cardboard is just as good, much more readily available, and can lay safely on its side. The full page illustration that accompanies this article shows several methods of making painting "handles" and should give you a good idea of your options. Attaching the figure is the last thing to do before beginning to paint.

With the figure fully prepared, your chances of producing a superior paint job are significantly increased. It may take as much as an additional hour to prepare the figure. But this preparation will be repaid many times over in the better paint job you now can do.

Order of The Indian Wars

P.O. Box 7401, AC 501-225-3996
Little Rock, Arkansas 72217

The Order of the Indian Wars is an organization formed to provide for the serious study of and dissemination of information of America's Indian Wars. This organization (not connected with an older, dormant organization known by the same name) is solely interested in the military history of the American Indian Wars, and works for preservation/protection of historic military sites from the American Indian Wars. The Order stresses that they are "just as interested in the 'Indian side' as in the 'Army/settlers side," but will *not* be a forum for political or sociological presentations or guilt trips. Their only interest claim is that of military history.

Those interested in the Order of the Indian Wars may contact the Order at the above address. Membership in the Order does require an initiation fee and annual dues, part of which pays for a certificate of membership and a quarterly journal. The first Assembly of the Order of the Indian Wars will be November 1-3 in Arlington, Virginia.

HOW TALL IS A GIANT?

In which Ye Olde Fantasysmith says he helps his friends. Decide for yourselves, gentle readers, but beware!

One of the factors that distinguishes fantasy games from standard miniature wargames is the size of the figures used: All fantasy figures are not the same height. This article will discuss the different sizes of fantasy miniatures and how to add any sized character to your miniature gaming set, from tiny sprite to storm giant.

If you purchased your miniature castings at a hobby shop that doesn't limit itself to fantasy figures, you noticed standard military figures on display. These miniatures probably were larger than the 25mm fantasy figures that you purchased. The difference between the different sizes of standard miniatures is called "scale." Blueprints, as well as many maps, models, and museum displays, are produced to scale. Scale uses a smaller physical size to represent the size, position, and proportion of a real or imaginary object.

Twenty-five millimeters is generally accepted as the "fantasy scale." It is flexible enough to represent all of the various types of figures likely to be represented in fantasy. In 25mm, a normal man about six feet tall would be represented by a figure 25mm tall from the bottoms of his feet to the center of his eyes. When this method of measuring is used, all guesswork is eliminated as to actual height Even when a headpiece is worn, the eyes are still visible.

Standard miniature figures are made in different sizes because they are of different scales. Figures in regimentals, for example, are from 15mm to 30mm when massed for miniature wargames, but might be ten times larger for use as a decorative piece in a living room. The same-sized man is represented by the 15mm as the 154mm figure. The difference in figure size is not supposed to represent a difference in character height, but is entirely due to differences in scale.

By the way, the most confusing part of all this scale stuff is the "scale fraction." However, since fantasy gamers are of the intellectually elite (with the possible exception of YOU, dear reader), it should be easy to elucidate. The "scale fraction" is also called the "scale." Fantasy's 25mm standard is also 1/72nd scale or 00 gauge; a glance at the accompanying charts will clear up most of your questions about the relationships between standard, scale, scale fraction, and model railroad gauges.

The scale fraction is always expressed in the ancient inch/foot method even when true figure heights are stated in the elegant metric system. Thus a 154mm (6.06") tall figure representing a 6' man has a scale fraction of .5/6 = 1/12. Those of you who enjoy mathematical progression will like this idea because of the smooth, interrelated flow of the scale fraction.

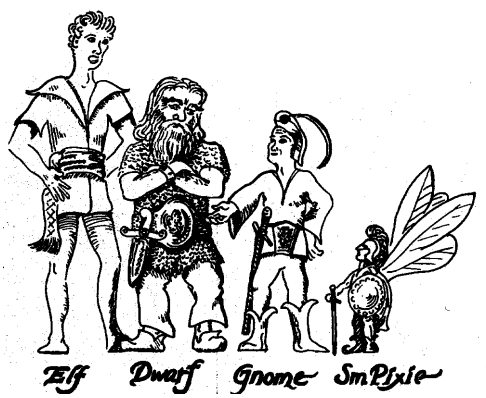
Now, budding mathematicians, a simple test of your capabilities: If 3mm figures ever become popular (heaven forbid!), they will be in 1/500 scale. Now get out your calculators, space cadets, and try to prove Ye Olde Fantasysmith wrong. My method is hidden somewhere in this issue, but I won't tell you where. You'll have to search each page of the magazine so as not to miss it (Echoes of a distant gong accompanied by mordant laughter. BHWAWAHWAHMERTMERTMERT)

When you get into fantasy miniatures, you find character/"racial" types that are actually *supposed* to be of different heights. That is, one figure may have the same scale as another, yet tower mightily in comparison. When you look at different manufacturers' offerings, this can become downright confusing. I have heard discussions that try to define miniatures in terms of scale and standard heights. It all sounded like so much mumbo-jumbo to my untrained ear. A quick survey of standard miniature literature and magazine advertisements deepened the confusion. This clearly was a job for the Fantasysmith.

So, in order to help those of you who have read this far, this article contains two explanatory charts. The first lists fantasy characters/races and the miniature standard height that most closely fits them. Heights are as defined in AD&D and the *Monster Manual.*

The second chart runs through the most common standard figure heights in millimeters and relates them to AD&D characters/races, This second chart also lists several manufacturers who produce figures of each height, but the lists is not meant to be exhaustive. Most of these manufacturer's products are not readily available in the U.S. It would be best to stick to those miniatures that you can obtain locally, and those who advertise in THE DRAGON.

Manufacturers of fantasy figures do not always adhere to the 25mm scale. This has advantages for the manufacturer, but alters the appearance of fantasy figures unnecessarily. The most common error of manufacturers is to *sell* 30mm figures but to *label* them as 25mm figures. In 25mm standard, a 30mm figure is actually seven feet, two inches tall, rather than the six-foot-tall person that might be considered "normal." Seven-foot-plus heights are so unusual in the real world that they are freakish. Think of it: If you met a 7' tall man, would you really expect him to be passed off as "Mister Average?'



Several manufacturers always ignore this problem of scale. Their individual character figures seem to loom over the standard 25mm offerings of other manufacturers. Larger figures cannot easily be mixed with standard man-sized figures unless some special capabilities are ascribed to the character represented. The large figures are fine for monsters and other non-player characters, though.

The point here is not to set up a purist approach which will cramp eveyone's style, but to help sort out what's available. Recently your busy author ordered skeletons from three manufacturers. They varied as much as 6mm in height, even though they were all supposedly made to 25mm standard It will be difficult to use them all as planned.

This is just as valid for gaming. Let's postulate that you want to get several Fire Giants to use with AD&D module G3— "Hall of the Fire Giant Ring. Buying "Fire Giants" from various manufacturers will get you a wildly uneven group. If you cared about such things, though, you could have gotten 54mm Imrie Risley Vikings or Rose Celts and painted them up as Fire Giants. Then you'd have a group of similarly sized models that look as if they belong together.

My own questioning has found that most players who use miniatures in their fantasy gaming don't really care overmuch whether an elven character model is actually 20mm or even 35mm tall. But by ignoring scale height, you lose some of the flavor of fantasy. Using figures that represent the supposed heights of characters emphasizes the differences between types. It's easy to understand why a gnome moves only 6" rather than 12" per turn when the little figure is only half as high as the figure of a human. Figures of giants who stand twice as tall

as human figures give a physical impression of the strength and danger these characters represent It takes guts to attack a giant—especially if you're a gnome.

Throughout this article, references have been made to the AD&D definition of heights for fantasy adventures. These heights are defined in a reasonable and consistent manner in TSR's publications. As shown in the charts, these heights can be translated into existing miniature sizes. Unless the hobby as a whole decides that this definition is really all wrong, we may as well stick with it

Fantasy gaming with miniatures is made interesting, in part, because of variations of figure height Concepts such as "scale fraction" and "standard height" can be confusing, however. Hopefully, this article has cleared up some of the confusion.

CHARACTER HEIGHTS AND AVAILABLE FIGURES

If you want to make this kind of character	You will be making a figure with this scale height	In 25mm std., exact height will be	But you'll have to buy a figure that's this high
STORM GIANT.....	21 feet	87.5mm	90mm
CLOUD GIANT.....	18'	75.0mm	77mm
FROST GIANT.....	15'	62.5mm	60mm
STONE, FIRE GIANT....	12'	50.0mm	54mm
HILL GIANT.....	10.5'	43.8mm	40mm
OGRE, TROLL.....	9'	37.5mm	35mm
GNOLL.....	7'	29.2mm	30mm
HOBGOBLIN.....	6.5'	27.1mm	30mm
MAN OR ORC.....	6	25.0mm	25mm
ELF OR DROW.....	5'	20.8mm	20mm
DWARF, GOBLIN.....	4'	16.7mm	15mm
GNOME, HALFLING, SPRITE OR KOBOLD .	3'	12.5mm	13mm
PIXIE.....	2.5'	10.4mm	6mm

MAKERS OF 54mm FIGURES (THE MOST POPULAR DISPLAY PIECES)

Almiral, Brescia, Britains, Bugle & Guidon, Cavalier, Eagle, Hinchcliffe, Historex, HR, Hinton Hunt, Imrie Risley, JAC, Jackboot, Kirk, Lasset, Labayen, Mainly Miniature, Men at Arms, Miniature Figurines (Minifigs), Monarch, Old Guard, Phoenix, Rose, Sanderson, SEGOM, Sentury, Squadron, Stadden, Tradition, Trophy, Wee Warrior.

MAKERS OF 25mm FIGURES (12/72—FANTASY SCALE)

Airfix, Armtec, Aurora (ESCI), Dixon, Garrison, Heritage, Hinchcliffe, Johannson, Lamming, Micromold, Minifigs, Minot, Phoenix, Ral Partha, Rose, Scruby, SEGOM, Warrior.

FIGURE HEIGHTS RELATED TO CHARACTERS

(1) ACTUAL FIGURE SIZE(mm)	(2) AVERAGE FIGURE SIZE(in)	(3) SCALE FRACTION	(4) SCALE FOOT EQUIV. (mm)	(5) SCALE HEIGHT IN FEET IF USING 25mm STANDARD	(6) TYPE FANTASY FIGURE	(7) OTHER USES OUTSIDE OF FANTASY GAMES:	(8) PARTIAL LIST OF MANUFACTURERS (U.S. & EUROPE)
154	6" (6.06)	1/12	25.8	36.6'	(Too large for use in fantasy games)		Airfix, Aurora, HR, SER 77
90	3-1/2" (3.54)	1/20	15.0	21.6'	Large Storm Giant	Display pieces	Eagle, Hinchcl, Lippt, Scruby Poste Militare
80	3-1/6' (3.15)	1/23	13.3	19.2'	Storm Giant	Display pieces	Arnwd & Ball, Stadden, DEK
	(3.03)	1/24	12.8	18.5'	Large Cloud Giant	Display pieces	Series 77, Old Guard
	(2.99)	1/24	12.7	18.2'	Cloud Giant	Display pieces	Imrie-Risley
	(2.95)	1/24	12.5	18.0'	Cloud Giant	Display pieces	Hinchcl, Lasset, Old Gd, Phoenix, Scottish Soldier, Scruby. Sovrgn
70	2-3/4" (2.75)	1/26	11.7	16.8'	Large Frost Giant	Display pieces	Jac, Elastolin
60	2-1/3" (2.36)	1/32	10.0	14.4'	Frost Giant	Display pieces	Armtec, Deauville, Willie
54	2-1/8" (2.13)	1/35	9.0	13.0'	Stone, Fire, Giant	Display, "toy soldier"	*****See separate list*****
40	1-1/2" (1.57)	1/48	7.0	9.6'	Hill Giant	Display, "toy soldier"	Elastolin (Japanese makes)
35	1-1/3" (1.38)	1/52	6.0	8.4'	Ogre, Troll	War-game	Armtec (Japanese makes)
30	1-1/6" (1.18)	1/60	5.0	7.2'	Hobgoblin, Gnoll	Wargame	Archive, Brigadier, Dragontooth, Minifigs, Rose, Segom, Scruby, Smith, Willie
25	1" (0.98)	1/72	4.0	6.0'	Man or Orc	Wargame (00 gauge)	*****See separate list*****
20	3/4" (0.79)	1/86	4.0	4.8'	Elf or Drow	Wargame (HO gauge)	Airfix, Hinchcl, Johannson, Hunt, K&L, Micromold, Scruby,
15	2/3" (0.59)	1/120	2.5	3.1'	Dwarf or Goblin	Wargame (Most popular now)	Minifigs, Liang, Martian Metals
13	1/2" (0.51)	1/148	2.2		Gnome Kobold	Wargame (N gauge)	Scruby, Sentury
6	1/4" (0.24)	1/300	1.0	1.4'	Small Pixie	Wargame, Micro armor	Heroics, Micromold

EXPLANATIONS:

(1) Actual figure size often referred to as "standard size" or simply to "standard." DO NOT CONFUSE THIS *STANDARD* with a *SCALE.*
(2) Figure size in fractional and decimal inches for comparison only.
(3) Scale fraction can be read "One unit of measurement in this scale is equal to "x" units in real life." Scale fraction is the scale.
(4) Using 60mm std: "If 60mm equals 6 feet, then 10mm equal one foot"
(5) Assuming that a model figure of this height were representing the 25mm standard, this column tells scale height in feet
(6) If a figure of this height were found in a fantasy game session, it could represent the given character types. (AU heights as defined in Advanced D&D and the Monster Manual by TSR.)

ANOTHER CHAPTER FROM fantasysmith's notebook

Pity the Poor Hobgoblin

"IS THERE A READER WHO KNOWS NOT THE VALUE OF MINIATURES? LET HIM CEASE READING LEST HE FIND OUT.

When Ye Fantasysmith started this column, a wee voice deep in his consciousness asked "Why fantasy miniatures?" The voice grew with each week that passed until it resembled the din of several hobgoblins. Enough! It is time to confront this blunt question with several pointed answers. Watch out, hobgoblins, you don't have a chance!

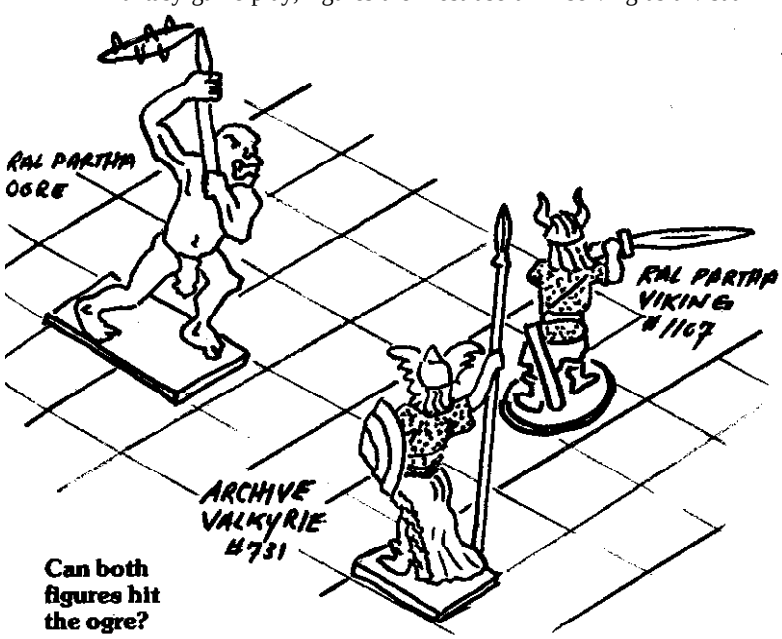
APPLICABILITY OF COMMENTS

Fantasy miniatures are primarily used in fantasy gaming. Therefore, most of my comments will be directed towards this section of the readership. But there are several miniaturists out there who are now producing very creditable fantasy display pieces in 25mm and larger standards. This segment of the hobby will be addressed also.

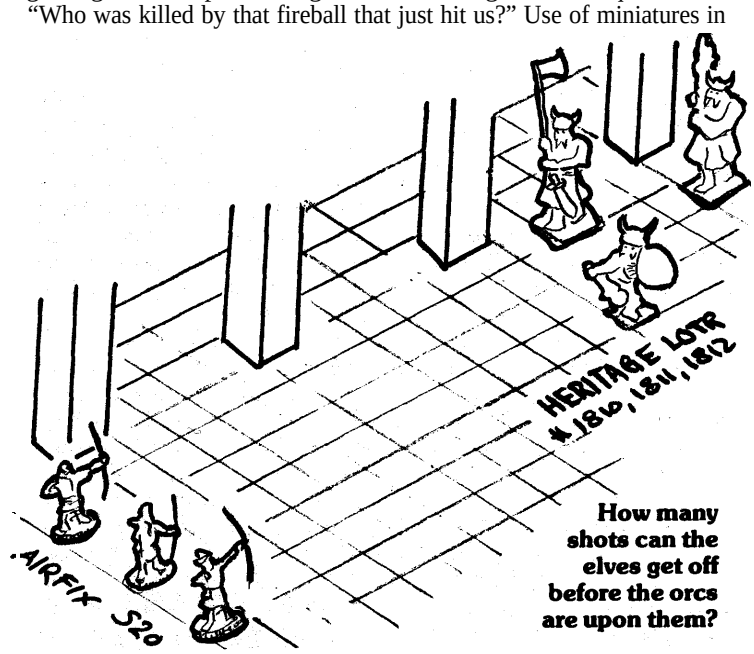
Most of the points made here were validated by a group of fantasy gamers who were interested enough to sign up for a class on "Miniatures and Fantasy Gaming." They provided an ideal audience and discussion panel. Among them were miniaturists who like to produce display pieces, and both new and veteran fantasy gamers. YOU can add to their ideas by simply writing a letter to "FANTASYSMITH," c/o THE DRAGON.

FANTASY MINIATURES AS COUNTERS

In fantasy game play, figures are most useful in serving as a visual counter for combat/encounter situations. They not only show the order of march at any encounter, but also show which figure is where during combat. The main advantage of this is to keep combat segments of the game clear and fast-moving. There is nothing so disruptive to the fun of gaming as an explosive argument stemming from the question of "Who was killed by that fireball that just hit us?" Use of miniatures in game play is illustrated in sketches that accompany this article, and in an upcoming article, "Hobgoblin Encounter."



Can both figures hit the ogre?



How many shots can the elves get off before the orcs are upon them?

Those players who regularly use miniatures on a ruled "gameboard" need never slow or halt their play to argue about:

(1) Any individual or group of characters' ability to move from point to point during a melee.

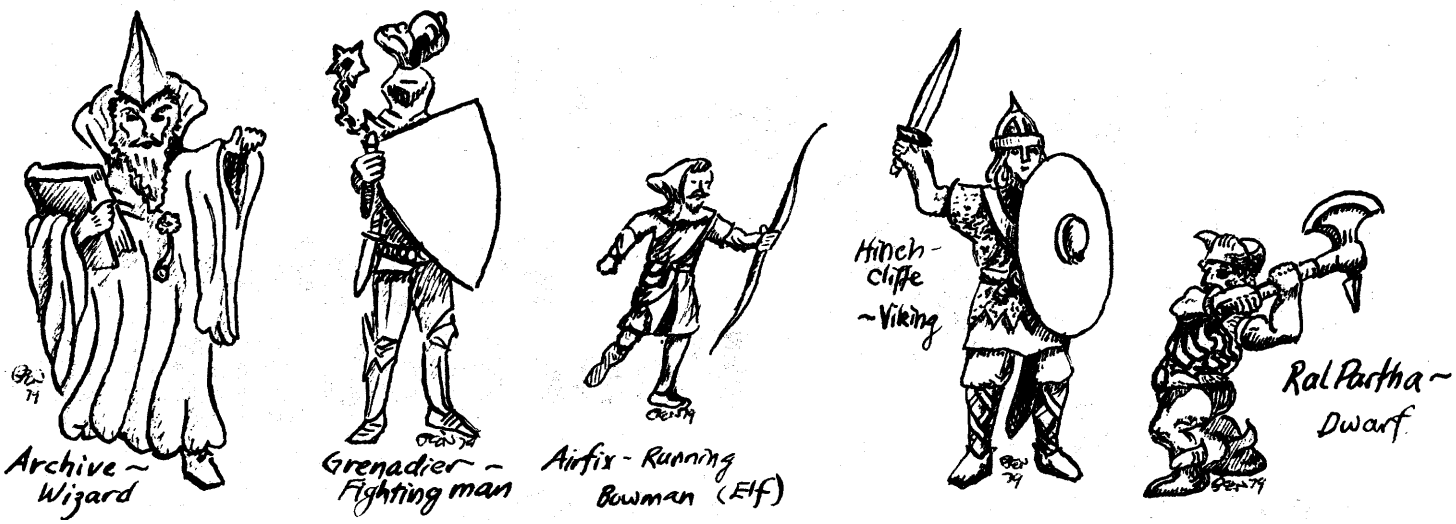
(2) The width of a hall or room and its effect on combat. This is especially true for multiple character actions.

(3) The effectiveness or applicability of any striking or missile weapon that is affected by distance or height factors.

(4) Whether any missile weapon will be blocked by any part of the scenery or one's own party.

VISUALIZATION

But do we really need finely animated and detailed miniatures for play counters? Certainly, unpainted miniatures can be used. For that matter, so can chess pieces, small coins, toothpaste-tube caps, or any of the small bits and pieces of scrap that are normally found about the



home, office, and workshop. Why insist on painted miniatures?

Surely, some type of counter is better than none at all, but the painted miniature is more than a counter. It helps the player enter into the spirit of true fantasy by allowing quicker and better visualization of a fantasy situation. When figures are of the proper scale, relative sizes of player characters versus monsters are emphasized. Visual indications of figure capabilities are also immediately apparent. The magic user's staff, cleric's mace, dragon's wings, and orc's arrows need no further explanation.

CHARACTERIZATION

The tiny figures used in play give opportunities for fuller use of imagination and even for expansion of the player character. Several of the newer characters-those of Ral Partha's Wizards, for example—are detailed and well-cast enough that their facial features actually show personality. (The Ral Partha figures referred to have already been seen in this magazine.) Developed character personalities create a new dimension in role-playing fantasy. Isn't it more interesting to imagine the reaction of a *pensive* elf or a *cantankerous* dwarf?

Even when actual character traits are not identifiable from facial features, the position and painting of the figure will suggest them. This projection of character traits increases player involvement and enjoyment, and can make for more energetic and inventive play. Adding traits to all characters, including henchmen, hirelings, and humanoid opponents, will suggest new situations and new solutions for old ones.

Most fantasy players use the same miniature figure to represent the same character, no matter what the level or physical condition of the character is. By using the same figure, it is easier to remember character traits and personify the character. This figure becomes an "alter ego" to some players. As long as some balance is kept in the player's mind, this makes for more enjoyable and realistic campaigns. The character you relate to will not normally do foolish things such as attack a group of fire giants without a lot of assistance, and will think out a way around the obstacle they represent.

ADDITION OF COLOR AND PAGEANTRY

Painted miniatures can be depended upon to add color to gaming. This is literally true. Color, animated form, and figure activity add visual interest and pageantry to games. Miniature modellers are particularly fond of the lack of restrictions fantasy modelling allows. Standard uniforms and colors are not required since there is no historical restriction. Even restrictions placed on ancient and medieval figures are waived for fantasy figures. For instance, it is very possible for someone to tell you that the Roman centurion that you just finished painting needs to be repainted. For instance, the "expert" says that Romans historically had no bright blue dye for cloaks and other cloth items. If, however, you were to tell this miserable snob that this was not a *Roman* centurion, but a commander in the Omnipotent Asure Legion from *Empire of the Petal Throne,* there could be no valid criticism. Who knows what colors lurk in the annals of fantasy? Only you do, and no one can tell you differently.

While fantasy modelling doesn't require the strict accuracy that historical modelling does, it still allows the modeller to use his favorite historical sources. This is a definite advantage. Any period of history prior to about 1200 can be used as a source of inspiration for ancient/medieval fantasy miniatures. And if you really want to model your figures after some other period, you can do so within reason. Your own favorite sources of inspiration may be interesting to others. Why not send in their titles?

ORIGINALITY IN SCRATCHBUILDING

For serious modellers, fantasy miniatures often have something that is lacking in most other forms of modelling—the challenge of producing a finished figure without somebody else's model to follow. Originality, craftsmanship and technical skill is thus at a higher premium for original fantasy modellers than for the 125th person to complete a diorama of part of Waterloo. Because of the 1/72nd scale of fantasy, the physical problems of creating settings and animation of large monsters are minimized. You don't have to build them as large as you would in, say, 54mm standard. This allows additional modelling freedom, since lighter materials can be used for dioramas or scratchbuilding. Craftsmanship and skill are harnessed to imagination rather than to strength of materials or other such physical laws. Great satisfaction can be obtained by turning out a competent piece that no one else has thought of yet.

It is this satisfaction that *Fantasysmith's Notebook* is aimed at increasing. Precious little about fantasy miniatures has been written before now. Figures are regularly reviewed in hobby magazines and painted pieces are on display at the hobby's conventions and at hobby shops. But there is no guide for those who want to get from the raw figure to the finished work. Standard military miniature painting gives clues (see list of good sources), but may not cover those areas that are of particular interest to the fantasy modeller. This column's continuations, plus the acknowledged suggestions of you readers, will fill that gap. Future articles in this column will continue to expand on the theme of fantasy modelling and the satisfaction it can give the hobbyist.

SUMMARY

Fantasy modelling is always open to question: Why, indeed, do you need fantasy miniatures? The answers given above can be summarized. Aside from their intrinsic beauty, they are useful in defining fantasy gaming action as well as strengthening the fantasy involved in role-playing games.

Fantasy modellers sometimes need reasons for their hobby, especially when confronting those who do not understand it. The reasons given in this article, together with the native inspiration of the reader, may be enough to convert a dedicated scoffer into a role-player who swears by finished fantasy fancies.

(Turn to page 44)

ANOTHER CHAPTER FROM fantasysmith's notebook

Pity the Poor Hobgoblin

(From page 30)

STANDARD MODELLER'S REFERENCE BOOKS

Even though military miniatures (standard regimentals) are not precisely the same as fantasy miniatures, much good, basic information is contained in works already produced by miniaturists in the last few years. Most are directed towards the painter of 54mm figures, and you'll have to adapt their advice. They are all good starting points, however. *Fantasysmith's Notebook* is not intended to supplant these works, but to supplement them. Here they are:

BEST BUYS: These works are all paperbound and inexpensive but still are comprehensive. They have excellent pictures and sound advice in their text.

Peter J. Blum, *The Model Soldier* Manual, Tricom Press LTD, 1013 Madison Ave., New York, NY 10021. 1970. 39pp. With illustrations by Clyde A. Risley, this is probably THE best book to start off with. About $2.50.

Brian Fosten & Roy Dilley, Painting and *Detailing Military Miniatures*, Almark Publishing Co. LTD, 49 Malden Way, New Malden, Surrey, KT3 6EA, England, Britain. 1977. 36pp. Finely illustrated, excellent color plates for detailing. If you want to work this precisely in 25mm, you'll need a magnifying glass and superior patience. The book sets an excellent standard, however. Available at Strategy and Fantasy World stores, $3.50.

Simon Goodenough, *Military Miniatures*, Chilton Book Company, Radnor, PA. 1978. 127 pp. Superior photography, excellent drawings, outstanding text: an inspiration! Certainly better than good enough. Fine list of suppliers of 54mm figures. Especially good in conversion methods. Available from BLUE EAGLE of Santa Monica, Calif., and from Strategy and Fantasy World. $9.50.

OTHER REFERENCES: Try to get a look at these in your local library. They have good pointers.

Bob Bard, *Making and Collecting Military Miniatures*, Rolton House, New York. 1957. 196pp. Good overall introduction to the standard hobby by an elder statesman.

Henri Lion & Valentine Been, *My Way*, Soldier Center, Boston, MA. 1979. Good reading when you're not in the mood to work. Lion has a lovable style that insists that the miniaturist identify with what he paints. This psychology is great for painting a Napoleonic hussar, but could be dangerous when you paint that Balrog from Dragontooth (Tom Loback #DE4). The book goes well with Sinatra records.

Michael Blake, *Making Model Soldiers*, Stanley Paul & Co. LTD, 3 Fitzroy Square, London, WlP 6JD England, Britain. 1975. 144pp. An Englishman's way is at least as good. Special painting methods for display and wargame figures. Available at Strategy & Fantasy World. $9.00.

Out on a Limb

(From page 3)

annoyed by "Monty Strikes Back" in your August 1979 issue. This is because the same article appeared in the December 1978 issue of your magazine. I don't see how this could have happened and am interested in hearing an explanation.

I agree totally with Jean Wells about Dwarven women having beards. Concerning the remark about never meeting a female dwarf without a beard, the players in this area have never met a dwarf woman with a beard! This also seems to be a matter that would fit better under the description of Dwarves in the Monster Manuals or Players Handbook rather than in the DMG. It makes no difference though since each DM can decide for himself if female dwarves have beards. They won't in my campaign.

Curt Hicks—TX

We used the wrong galley of type at the last minute. Monty Haul went into that particular issue at the last minute to replace a piece that didn't come thru on time. So sorry . . . .—ED.

'Important mistake'

Dear Editor,

I don't mean to be picky, but I believe that this is an important mistake. In TD #27, on page 29, in your article "Giants in the Earth," you said that Fafhrd fights with Greywand in his right hand and an axe in his left.

This is incorrect, as Fafhrd lost his left hand in "Swords and Ice Magic." (If you want to know how, read the book.) In its stead, he wears a hook. He also has adapted a long bow to fit into his stump. This fact, however, makes him even more awesome than ever.

Bert Calfee—CA

I consulted with Mr. Schick on this and he explained to me that Fafhrd listed in GITE represented an "average" Fafhrd, as he appears throughout the majority of the cycle. Certain other characters, past and future, will be similar in that regard.—ED.

'Expletive deleted'

Dear Editor,

We would just like to inform Marc Jacobs (whose letter appeared in Dragon #28) that he is a *(expletive deleted!).* The beauty of D&D is that it is an open-ended game which may be interpreted in a wide variety of ways.

Mony Link, Trevor Link,
Rick Caldwell, Dann Caldwell—PA

'A matter of opinion'

Dear Editor,

First of all, your magazine is fantastic. I always haunt the bookstores weeks before the next issue is going to come out in hopes of getting an early one. I do have one criticism, though. I know it's tough to get a magazine as big and of such great quality as *The Dragon* out, but the times you guys release your issue fluctuates as much as the weather. I'd really like to see something done about this. Perhaps a little estimate in each issue as to when the next will be out.

The main reason I'm writing has to do with your feature *Out on a Limb.* I think it's an excellent idea in theory, but I wish you would censor letters that are full of unjust criticisms, and other crud from the good informative letters.

Of course such things are a matter of opinion, but it seems to me that the last letter in Out on a Limb in #28 (Marc Jacobs') was obviously in the former category. I quite agree with Mr. Kask's comments on the letter. So why don't you apply a flaming sword to the letter, instead of wasting valuable room on it. If you're that hard up for letters I feel that Out on a Limb should be discontinued. I would really like to see more letters of the other kind that were in that issue (Don't worry, guys! Three out of four ain't bad.).

Thanks a lot for taking time to read my letter.

Jeff Fleming—MI

We try to have. . . LIMB represent a cross-section of the mail we get. Until just recently, we seldom ever got kudos—just lots of bitches and gripes. I think it is useful to the readers to see how our mail runs, tone-wise, to see what we deal with in the course of a month.

As to our erratic appearance time, we are not too much to blame for that. In fact, we have been getting recent issues out closer together as we try to get back on to the schedule we have set ourselves. More often, it is the distributor that delays for one reason or another, over which we have no control.—ED.

ANOTHER CHAPTER FROM fantasysmith's notebook

Paradise for Painterly People

Amid the sweaty smoke of Schwartz Physical Education Center, a deep, staccato sound boomed over the chaotic hubbub. This was not the sound of a Browning heavy machine gun or the battle commands of a Balrog, but the message of a prophet—"Duke" Seifried of Heritage Models. His message was simple: "Start painting your figures better and faster using a different method."

His claim: *Anyone (yes, even you)* can paint 25mm figure in 2-5 minutes without sacrificing detail or definition. All you have to do is BELIEVE. This article describes the Duke's method, but BELIEVING will be up to you.

Wipe Rag- old sheet is good- Don't use paper—not strong enough
Water for thinning & cleaning~
A throwaway plastic cup is ideal
Colors of secondary interest (capt on)
BEANS
Brushes: #2, 1, 1/0, 5/0 Heritage is good, Windsor-Newton's best Price is the difference
Be careful—don't spill anything on minis rule
Your workpiece!
PAINT IN GOOD LIGHT!
A piece of glass or tile makes an excellent palette
Colors of immediate interest with Caps off
Fantasysmith

What you need to get under way

Duke Seifried and His Style

Before you read Duke's message, take a look at one of the most extraordinary individuals in the hobby—the Duke himself. There is a certain type of fellow whom one calls "boy" until he reaches such an advanced age that this moniker becomes horribly inappropriate—then you call him "uncle." Duke Seifried has reached the latter stage and refers to himself as "Uncle Duke." "Tell 'em Uncle Duke sent ya," the portable loudspeaker thunders.

Seifried is a one-man hive of activity. He's a show by himself—promoting, painting, pestering all at once in his best sideshow barker style: "Hurry, Hurry, Hurry. . . . in five minutes the most exciting new adventure gaming developments will be demonstrated right before your very eyes." Despite the flim-flam-man approach, Duke knows that he's the ringmaster as well as the main event.

In the big tent, Duke carries on painting demonstrations, adventure gaming, and standard 15mm miniature battles. At the concession stands, he sells complete Heritage store outfits while he eats lunch. Then, still energetic, he rushes to the real sideshow to flail away at the maddeningly inefficient drones that Heritage hires to sit on chairs in its retail booth. Duke's energy helps his firm. His painting techniques can help you.

The Claim in Perspective

Finished figures in five minutes may seem unbelievable to you, but Duke can prove it. He'll take a crisp twenty-dollar bill from anyone unwise enough to disagree with him and back the dispute with money. To understand the impact of Duke's claim, let's compare his five minutes with some standard painting times, using a few relatively honest examples.

Joe Miceli, a dean of the fantasy painting professionals, is proud to exhibit 25mm figures that have as much detail as 54mm pieces. He says it takes "a week" of spare time to paint a warrior prince atop a dancing destrier. This comes to close to five hours, according to Joe's reckoning. Whether that estimate is close on the near side or the far side, Joe has not said. (Fantasy painters are like EPA gas mileage ratings when they talk about painting time—you have to watch them.)

Tim Kask of *The Dragon* once painted 300 or so figures in a year. He estimates 40 minutes on the average for a 25mm footslogger from the Napoleonic era. Tim should be sure—he printed the time in this magazine. (That's 200 hours of painting a year, mathematicians.)

Your own humble Fantasysmith thrashes around for about 6 hours to paint a Centaur king which is slightly less than perfect.

These indicated times are for figures requiring special loving care, and they imprison a painter in a time bind that limits production to only a few pieces per month at maximum output. Such an investment of time is beyond the endurance of most fantasy miniature painters, "turning off" many who refuse to put up with the dragging hours.

The same anxious boredom was experienced in Europe when miniaturists wanted to have large numbers of figures for big dioramas or for wargame armies. They developed "quick" painting methods for turning out painted figures. Quick painting concentrated on getting color onto the miniature figures fast, without too much worry about fine detail. The method proved to be perfect for the second line of a wargame army, or for the diorama figures furthest from the observer's eye.

Over the years, the quick method of

When your finished figures look like these, you've arrived!

painting miniatures was improved, and better methods of adding definition and detail were introduced. Even the castings were modified to allow the miniaturist to paint them quicker and more accurately. The Duke's method is a summation of earlier methods and "tricks," combined with a few new ideas derived from new painters.

Step by step
A. STAIN
Figure used: John Carter series
Don't worry about slopping the paint now, just stain it on with gusto.
B. WASH
This stage deepens the shadows that staining showed you.
C. DETAIL
Now is a good time to paint in the metal parts.
D. DIMENSH
Any "mistakes" are eliminated with this step.
E. DRY BRUSH
Your figure will look as if you had spent a lot of time on it.

With Duke's method, most fantasy players can aspire to several character pieces as well as a host of henchmen and hirelings. Any ambitious Dungeon Master can now expect to have all the orcs and kobolds he wants, as well as a series of dragons, a platoon of drow, several disgusting trolls, a squad of giants, and a spectre or two supported by mummies and skeletons. Vast fantasy armies are no longer out of the question. Figure painting is removed from the realm of the expert and democratized so that every man (and every dwarf) can have a personal treasure chest of finished figures—or, if you're a fantasy field marshal, a personal army.

What's in Those 5 Minutes

Before you start rumbling in disbelief, you should understand how the Duke's stopwatch was calibrated for pacing the time and motion study of himself. Fully finished miniatures require four steps—Prepare (includes Priming), Paint, and Preserve. Duke counts only the painting time. Whatever time he spends on preparing the figures with knife and file is ignored, along with the time for priming and final preservation with gloss and clear coating.

Figures are mounted for mass painting before the clock starts, too. Here Duke has hit upon a method for mounting that would gladden the heart of any flinty-eyed industrial engineer. Take an ordinary ½" board that's about 4" wide. Cut it into 10" lengths, and use ordinary white glue to attach half a dozen similar figures along the edge at about ½" intervals. You are now assured of having the minimum space required for your brush to move from figure to figure. Duke calls this mount a "painting dolly." YOU can call it anything you like, but having several figures in close proximity is crucial for holding down the time required to paint each figure. (See accompanying illustrations for details.)

With six prepared and whitened figures ready to go, you will soon see why it's important to have similar figures on each dolly. There is to be no switching from one character type to another, and no jump from dwarf to giant in mid-brushstroke. Variation could force decisions, and they always take time. The only thing you have to decide is what color to paint the surcoat or shield, and this decision can also be taken care of before painting by setting out colors you want to use.

Paints, brushes, pallet, wipe rags, and prepared figures must be marshalled before the clock starts. This is good practice anyway, and is crucial to time trials. You may not need to actually change anything you're doing now to pull off this little trick, but conscious preparation is good for your times. It's sort of a mental warmup for the fun to follow.

A reasonable set-up is illustrated in this article. The Duke convinced me that set-up was important without even mentioning it. He did this by simple demonstration.

Duke's method is excellently printed out in a pink brochure (PINK, Duke?) that he gladhands out to gawking onlookers and potential converts. The Duke has said it's O.K. if I liberally quote from his masterwork. You, however, may want the true WORD. Send to Heritage for it—tell 'em "Uncle Fantasysmith" sent you (har, har, har). Include a self-addressed, stamped envelope and possibly some trinkets to pay the starving mercenaries. More explicit and dulcet instructions may be forthcoming. Heritage advertisements right here in *The Dragon* may soon tell you what else lies in store for those who use Heritage paints.

All that follows in parentheses is my commentary, the rest is pure Duke: Drawings have been added to aid visualization.

(Heritage paints were conceived and produced to offer the painter:)

1) A white, water-based primer that would etch into metal and have no strong fumes.

2) A selection of colors which would offer the exact shades I wanted . . . arranged in family groups so that shading and highlighting would be a snap. The paint had to dry quickly. . .

3) Protective coating that would not only guard against paint being rubbed, flaked, or chipped off, but would also produce realistic finishes.

4) Easy cleanup . . . just plain water would thin the paint and clean brushes and hands.

(Turn to page 8)

Fantasysmith *(From page 5)*

Stain Painting Technique

In the past, all painting had to be done with very careful, time-consuming hand detail. . . now you can get the same detailed effects in a fraction of the time. The real secret to stain painting is that it is self-shading. Rather than using full-strength paint, mix equal parts of paint and water. The thinned paint is "stained" into the white primer. The stain flows in a capillary action and tends to collect naturally in the folds and depths of the figure. The higher relief on the figure is only lightly stained. The effect is a self-shaded figure! . . . Only minor additional coloring is now required to finish off the figure.

Wash Techniques

Washing is very similar to staining, except the ratio is one part paint to three parts water. This very thin wash is applied to areas previously stained where it acts as a tinting agent to deepen details you want to enhance. For best results, use a darker version of the basic stain color.

Detailing Concepts

Straps, belts, pouches and so on may be dubbed in with only minimal care, as the dimensioning technique (to come) will cover all the edges and sharpen detail. For detailing use either full-strength paint or very slightly thinned paint.

Skin and Facial Features

All flesh tones are based on a base coat of our "Ruddy Flesh," which is applied full-strength. After this basic coat of flesh color is dry, various washes are applied to bring out the facial detail. (Painting facial features and flesh tones in general will be covered more fully in a future article.)

Dimensioning Technique

This is a final wash of Black or Gunstock Brown applied above and below belts, straps, pouches, etc. as well as between any abrupt color changes on the figure—for example, where a dark green coat overlaps white trousers. It is used not only to "pop out" fine detail but also to cover all raw edges and to define every part of the figure.

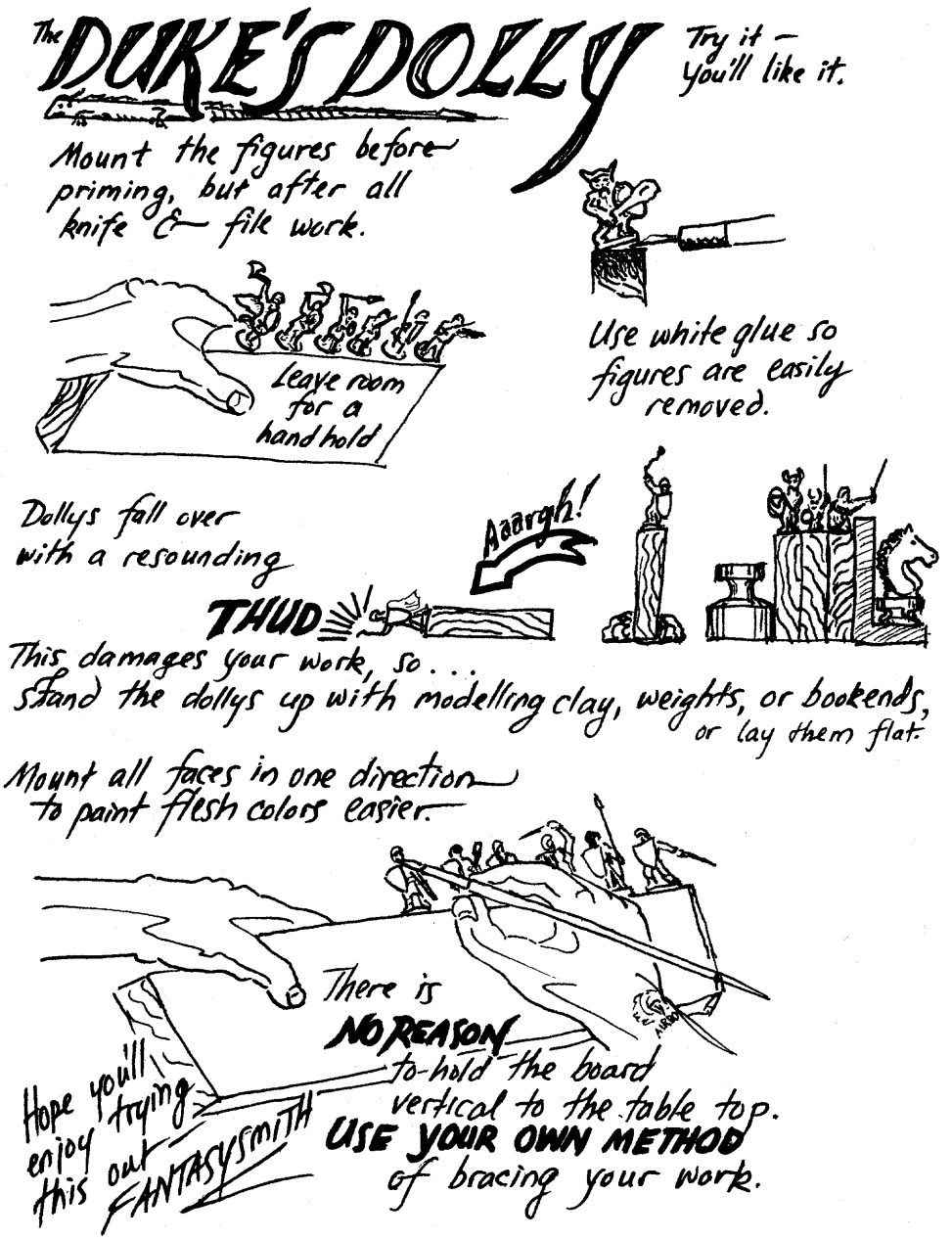
Drybrushing

Use full-strength paint which is the lightest member of the color family . . . wipe most of the paint out of your brush. Now, very lightly drag the brush over the figure. A little of the lightly colored paint will cling to the high points of the figure and all the high relief detail. You'll see the figure "come to life" instantly. . .

Protect

Now you'll want to protect your figure using either Matte or Gloss Protective Coatings.

(Thus endeth the reading from Duke Seifried.)


The DUKE'S DOLLY
Try it — You'll like it.
Mount the figures before priming, but after all knife & file work.
Leave room for a hand hold
Use white glue so figures are easily removed.
Dollys fall over with a resounding
THUD
Aaargh!
This damages your work, so . . .
Stand the dollys up with modelling clay, weights, or bookends, or lay them flat.
Mount all faces in one direction to paint flesh colors easier.
There is NO REASON to hold the board vertical to the table top.
USE YOUR OWN METHOD of bracing your work.
Hope you'll enjoy trying this out
FANTASYSMITH

After going over the words above, I feel the BELIEF was created from actually watching Duke paint up his figures. The words themselves, though worthwhile instructions, do not convey the excitement and certainty that viewing the master conveyed. His performance is really inspiring, and he's done it many times before awestruck audiences. Trouble is, this merchant of fantasy has not yet learned what the teachings of wizard Marshal McLuhan can teach him. By videotaping his well-prepared show on cassettes, the Duke could cover the world with inspiration. The magic of the media could change Duke from a third-level Magic-User to a fifteenth-level Illusionist. Since he's on our side, the hobby and all its adherents would benefit from this transformation.

If you still do not now BELIEVE, the Duke has graciously lent me several of his painted figures. (Me thanks to thee, m'Lord). When questioned thoroughly with the aid of my henchman's thumbscrews, the Duke finally admitted that these took more than five minutes. "About ten. . ." he gasped, "And now will you please let me GO?" Duke's figures are supplemented in the photographs by the work of two others who use Heritage paints and methods similar to Duke's.

Even at "about ten" minutes, the time is cheap, and Duke's method is certainly worth trying. At ten minutes per figure, you can knock out five or six an hour.

Adding preparation, priming, and preservation time that is twice your painting time, and allowing for a ten-minute break each hour, you can finish 15 to 18 figures in just 3 evenings of three hours each. THAT'S REVOLUTIONARY!*

But you must first BELIEVE!

**This article is merely descriptive and is not a recommendation of Heritage paints by either the author or* THE DRAGON.

(Turn to page 57)

Air Eaters

(From page 55)

areas with from one to three industrial units, the number being printed directly on the map. During the production phase, the Terrans total the number of IUs available (not destroyed by previous Alien activity) and spend these to buy new units (the cost varies) or repair devastated IUs.

Perhaps the most important phase follows. It is during the Research and Development phase that the Terran player attempts to come up with the scientific knowledge necessary to build advanced units. This whole concept of an improving technology is critical. Unlike the Air-Eaters, the Terrans have an evolving technology and are able to improve their weaponry. Only by researching and building better quality units will the Earthlings have any chance against the alien invaders.

The procedure is fairly simple, revolving around a die roll. To make this research die roll, the Terran must first expend ten IUs (these are spent regardless of the success of the roll) and meet certain prerequisites, such as having been involved in the appropriate type of combat (for example, having been engaged in land combat when attempting to roll for tanks or batteries), and in the cases of more advanced units, already having the technology to build certain other units (the Terran must already know how to build Laser Batteries before attempting to roll for Disintegrator Batteries). In addition, if certain other conditions are met, usually the destruction of a certain type of Alien unit, a die roll modifier of -1 is allowed. Success for a given project occurs on a roll of 1 or 2. If the roll is unsuccessful, all the conditions must be met again later for another roll to be made.

The types of units available to each player is fairly broad. The Alien player is allowed to build all of the types in his mix, but the Terran, as outlined above, must research the vast majority. It is quite possible that the Terran may never build certain classes of units due to lack of research for them.

Alien units include two types of spacecraft. He has one Mothership and may never build another. Indeed its loss is very serious since it is the source of the Alien's beaming capability and, because it begins the game with a base on it, the ship is important for its production capacity. The Mothership is protected by Escorts, which fight well against the early Terran spaceships but pale when matched against the later Corvettes.

The Alien invasion force is made up of four kinds of units, each fulfilling a specific role in the overall conquest of Earth. The Crawler is used for offensive purposes, since only it can fire at the Terran units and industrial areas opposing it. It has excellent attack and defensive abilities, matched only by the Terran Disintegrator Tank. It can be used with equal effect on land or under water. Its weakness is its speed, one hex per turn, but this can be rectified by assigning a Lander for transportation.

Highly mobile, the Landers are very speedy transport craft. They can be used to carry Crawlers around, a very effective coupling, or to carry undeployed bases and air converters to their setup sites. Speed must be traded for vulnerability, however, and Landers are the easiest Alien units to destroy.

Bases are non-mobile units which serve as sites for production and terminals for beaming. They are very valuable, since without them the invaders can produce no new units.

Air converters serve a special function. The ultimate goal of the Aliens is the transformation of the Earth's atmosphere into one comfortable to their particular biochemistry. A track along the map bottom is used to record current level of change. It begins at twenty but moves down one space per functioning air converter at the start of each turn. Once the level reaches zero, it's time to set up another game; the invaders have successfully rendered Earth's atmosphere unbreathable. This makes ACs an important unit for the Alien to build and the Terran to knock out.

At the game's start, the units available to the Terrans are very limited: sub fleets and armies only. Both are restricted to their respective combat environments, and neither is very effective against the Alien units. While armies can never be eliminated, only two may attack in a hex, effectively precluding any mass assaults. They are also rather slow, one hex per turn, and require one of the Terran player's Transport moves to get anywhere far away.

The next stage in Terran weaponry is the Laser Battery. Like armies, they are minimally effective against the Alien pieces, but they can be stacked without limit. They may only move by Transport, however, so any mobile alien unit can run from them before the combat phase, making the Batteries most effective against non-mobile aliens, Bases and Air Converters.

Laser Batteries are complemented by Laser Tanks. They have essentially the same attack abilities, but are much more likely to survive and can move on their own. Disintegrator Batteries and Tanks are very much like their laser-armed counterparts, except their attack strength is markedly improved.

For undersea operations the Terrans have, at first, subs, and, once researched, improved sub fleets. The only difference in the two is the increased attack capability of the latter, though this is very crucial. As the game progresses, large numbers of laser and disintegrator units roaming around on the land often force the Alien player to establish his bases underwater. Only subs can attack these bases.

For spacecraft the Terrans have two types, the Space Attack Force and the Corvette. The first is very poor when matched against Alien Escorts and serves mainly as a way to fulfill the prerequisite for building Corvettes. These latter ships are excellent, superior to both the Alien Mothership and Escort craft.

In addition to buying units, the Terran player can spend his IUs repairing devastated industrial areas, or, if he has researched the technology, re-converting the air. This process is expensive, but sometimes crucial in staving off an Alien victory.

INVASION OF THE AIR-EATERS has a number of advanced game rules. These add political considerations (Communist and non-Communist armies may not function together until the air is half-converted and they then presumably see the Aliens as much more of a threat than each other), special movement and production considerations for Antarctica, and some additional minor attack capabilities for Terran armies and sub fleets.

The advanced game also adds rules for nuclear attacks by the Terrans, a very expensive tactic since the fallout destroys three IUs and the attack is not guaranteed to eliminate the target.

Oil and oil-producing areas take on importance in the advanced game since the Terran must match each function IU with an oil unit, while the Aliens may devastate these as well as IUs. After a number of plays, this reviewer has found that, as the designer suggests, it is relatively easy and does not affect play, to leave out the section dealing with oil. The rest of the advanced game rules are easy to implement and add a lot to the game, so that even beginning players should not be tempted to play more than a couple of games using just the basic rules.

Howard Thompson, one of the head men at Metagaming, has called INVASION "the best micro we've published," and I tend to agree. The game combines a number of different concepts in a blend that should please most gamers. A grand strategic situation is handled quite nicely with a small map and a handful of counters. The situation is classic, and the game mechanics bear this out. The opposing sides are quite different, both in the units available to them and the tactics needed to use those units properly. This differentiation add to and builds on the games colorful rationale, as well as providing the two players with the challenge of handling an opponent whose capabilities are not a mirror image of one's own. There are plenty of tactics here to be sought out, plenty of different plans and strategies to employ. The result is a game which, from this reviewer's standpoint, succeeds on all points.— *Tony Watson*

Fantasysmith

(From page 8)

PAINTERS FEATURED IN THIS ARTICLE (Those marked * contributed finished miniatures):

*Duke Seifried
President, Marketing Manager
Heritage Models, Inc.
9840 Monroe Drive, Bldg 106
Dallas TX 75220

A regular at hobby conventions, Duke may be coming to your area's major hobby shop soon. He will put on demonstrations for those who stock Heritage products.

Timothy Kask
TSR Periodicals
P.O. Box 110
Lake Geneva WI 53147

Tim is one of the most generous painters around. He's been known to gives his finished miniatures away as presents. Greater love has no man . . . .

Joseph Miceli
1825 Bay Ridge Ave.
Brooklyn NY 11204

A dean of miniature painters. Joe's work requires far more time than Duke's quick method but produces marvels. Joe's painting could easily serve as a high standard against which other miniature painting is measured, but cannot be used as a model for most hobbyists. Look for his work at Courier or Dragontooth booths at conventions.

*Mike Barbero
c/o Stan Johannson
4249 East 177th St.
Bronx NY 10465

Mike produces finished pieces done in good painterly fashion. Dungeon Masters can get a quick cast of characters from him. His work is said to win prizes.

*John & Connie Nesl
2119 Woodbine Avenue
Knoxville TN 37917

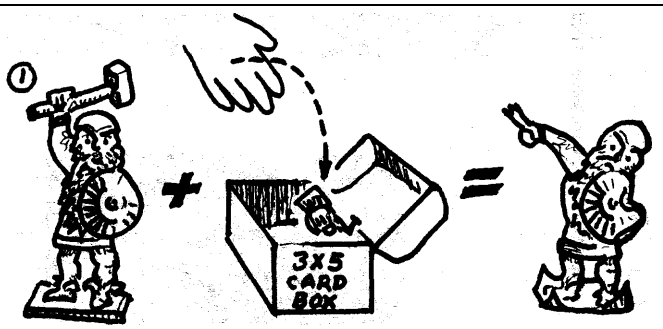
This husband-and-wife team specializes in fantasy miniature painting. John can paint mass armies well. Connie likes to put in the extra detail required to produce character figures. May they paint happily ever after!

ANOTHER CHAPTER FROM fantasysmith's notebook

Miniature Spotlight

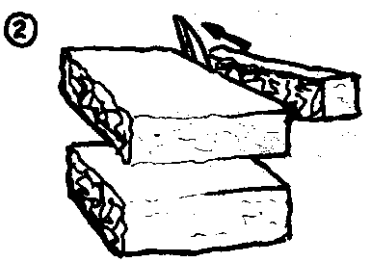
Welcome to the first (and we hope not the last) Fantasysmith's Miniature Spotlight. This special feature is designed to expose readers to other people's ideas on the furthering of the hobby of miniature figure collecting and miniature gaming.

The first Spotlight falls on George Buce of King of Prussia, Pa., who has a solution for storing and transporting miniature pieces at minimal cost.



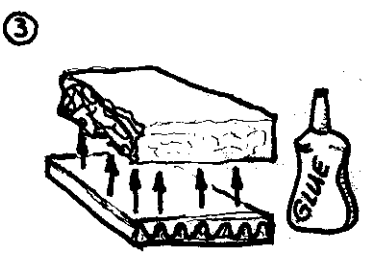
You may spend hours painting your figures, but if you carry them loosely so they can be shaken around, they'll wind up looking as if they took 20 hit points from an Ogre Mage!

* * *



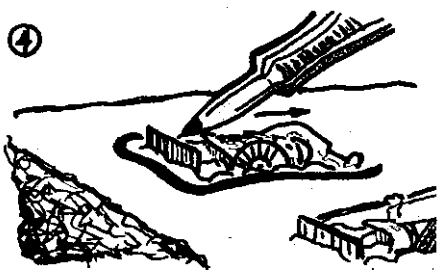
But George's figures look great! Here's how he does it: First, cut foam-rubber scraps to fit inside any convenient-sized box.

* * *



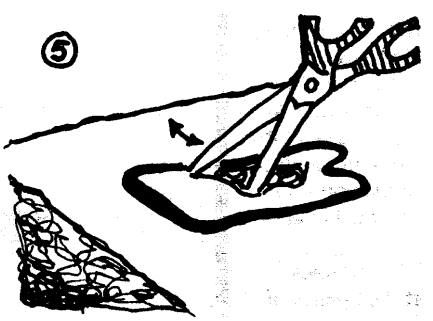
Glue cardboard on the bottom of the foam rubber and lay your figures on top of the foam.

* * *



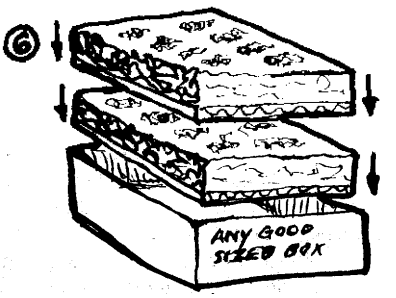
Draw around each figure with a felt-tip pen.

* * *



Carefully snip enough foam rubber out so that the figure is completely surrounded by foam. Don't try to be too exact; it's not worth it.

* * *



You can put one foam-rubber holder on top of another in the same box.

* * *

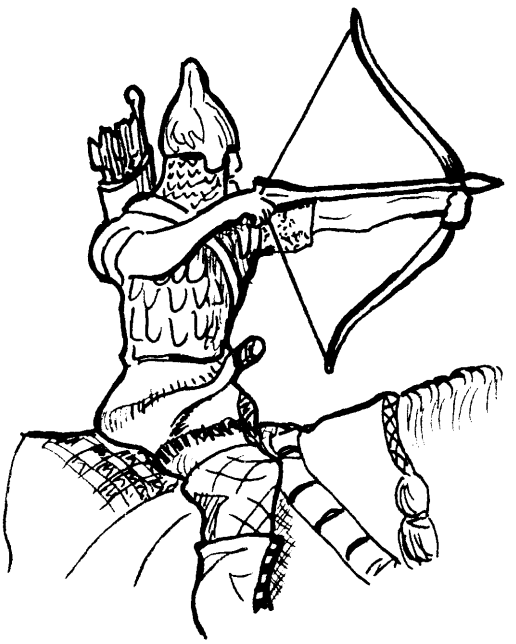
Under normal conditions, you can take the box almost anywhere without harming the figures—just be careful when you're carrying them!

* * *

(Editor's note: The apparatus described here is quite similar in principle to Tank Trap, a storage case for micro armor designed and produced by Orisek industries. However, there is no such device on the market for the storage of other types of miniatures.)

Do you have an idea that can increase others' gaming pleasure at little or no cost? Send it to The Fantasysmith, c/o The Dragon, P.O. Box 110, Lake Geneva WI 53147, and you may find your idea in the Miniature Spotlight!

The Mystery of the Bow

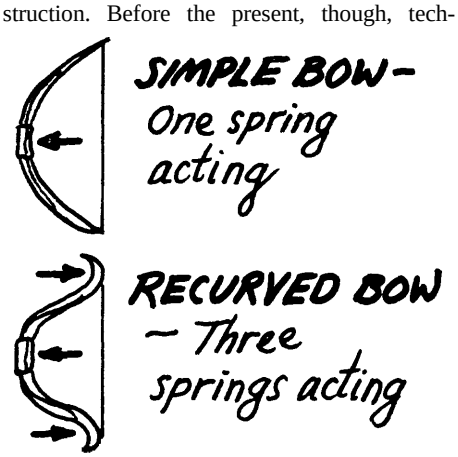


For accuracy and range together, the bow and arrow held preeminence on the battlefield for the entire ancient period, and continued right down to relatively modem times. Napoleon and his staff were attacked by a swarm of arrow-shooting Cossacks in the Russia of 1812, and the Sioux Dog Soldiers opposed modem weaponry with bows as late as 1908!

Until the advent of reliable light firearms, true bows were preeminent—the crossbow had too low a rate of fire to be a successful open field competitor, and could never be used in a running cavalry battle.

The bow is an ideal index to early culture and technology. Its sprung form, as well as its function, was universal. Limitations on classical bows were the strengths of materials and construction techniques used. A longer bow provided only slightly more power. Only after sinew and other materials were compounded with springy wood could maximum bow strength be reached and a superior recurved bow produced. Tougher materials and recurving allowed Mongol archers to shoot through field plate armor worn by Europeans in 1239.

Today, recurved hunting bows are made of spring steel or laminated specialty materials, and the limits of a bow's range and power depend on the strength of the huntsman rather than on the materials and construction. Before the present, though, technology limited bows, and the development of the bow is as fascinating in its own right as the more recent technological developments of long-range missiles.



Bow developments are not mysterious, though, and the mystery of the bow relates primarily to miniatures today, since bows are not used much anymore. The mystery derives from the physical use of the bow itself. You can shoot an arrow from either the right side or from the left. It is painfully obvious to anyone who thinks about it that any culture's individuals would fire from only one side, not both. Children would be taught by their fathers, and would never question the method. Peer pressure and ridicule would probably keep everyone from changing the way they shot

This obvious fact has not penetrated to the sculptors of miniature figures. For example, miniatures developed in England, such as Minifigs fine 25mm Assyrian archers (A), show the arrow being shot from the left. A miniature from the U.S., such as in Imrie Risley's beautiful 54mm Mounted Assyrian Archer (B), the arrow is being fired from the right side of the bow. So either Minifigs or IR is wrong.

This little squabble could be cleared up merely by some research into existing ancient sculptures and friezes or pictures of the same. The full mystery is not whether Minifigs or IR is wrong. It is *WHY* one culture shoots from the left and another from the right. If you could assemble left- and right-sided cultures into some sort of a pattern, you'd have an idea of the flow and predominance of cultures in ancient and prehistoric times. If you can find evidence that Incas fired from the left and Mohicans from the right, you'd have evidence of two distinct and possibly antagonistic cultures. Why do we Americans shoot right and the British left? Did we learn from the Indians, or was it a symbolic break with the Ring's archers sometime after 1776? And if the Incas shoot left, is their culture related to the British? Yo Ho, the mystery of the bow deepens! Off to the books, budding cultural anthropologists and ancient historians. The final answer awaits you alone, dear reader!

ANOTHER CHAPTER FROM fantasysmith's notebook

Skeleton Crew: Down to the Bare Bones

Many of the figures you buy for fantasy gaming are not quite in the position you want them. As you go further into miniature modelling, this will be more and more irksome. Without being able to change your figures, you may have to paint up miniatures that aren't the way you want them.

Actually, minor alterations are fairly easily done. This article will discuss basic, simple reanimations that can add to the variety of your miniature set, and require no special tools. It will do so in the context of the skeletal undead.

Skeletons used to be a bit scary to me. Going to museums and seeing the bones of great mastodons and reptiles was spooky, even though I knew they couldn't hurt me. Human skeletons were even spookier; they always seemed a bit threatening. Skulls were especially weird, with their dark, empty eye sockets and eternal grins.

But in order to get to the bare bones of things, you have to understand skeletons. Their bones are the basic structure on which all else is hung. Bones give support to the muscles and flesh, and determine balance and proportion.

My own mistrust of skeletons evaporated in a physical anthropology class. There I met a fellow who believed that beauty is much more than skin deep. He thought that Marilyn Monroe must have had a particularly beautiful skeleton. After I stopped laughing, I had to admit that perhaps he was right. After all, every beautiful woman I have ever known had a skeleton inside her. So do you.

All art students who wish to draw people must first learn about the skeleton, and medical students agonize over the Latin names for your bones. A miniature painter needs only to know that "de head bone's connected to de neck bone," but a little more knowledge in this area is essential to being able to modify miniatures. Skeletal figures will be extremely useful in D&D in their own right, since skeletons are fun to have around to throw at adventurers that do not have Clerics with them. All the best families have skeletons in their closets, and you should have a few in your fantasy miniature collection.

The reason behind needing to know skeletons is that any miniature will look ill-proportioned if it doesn't have its arms, legs, and head in the tight place, at a reasonable angle, and of properly proportionate length. If you know "dem bones," you'll never make mistakes by proportioning miniatures wrong. This article will use a particular set of miniatures as an example: Grenadier set #W-51, "Skeleton Warriors."

When I first looked at this pack of figures, I was a little disappointed. There they were: six figures exactly alike. The minor anatomical problems could be easily overlooked—after all, these were fantasy miniatures and were less than 1" tall. But how could anyone live with regimented undead? *'Tenshut! Forward, Stagger! (Rattle, shuffle, rattle, rattle, rattle)"* Those skeletons were much too orderly! They probably didn't have a brain in their head.

Yet the Grenadier figures are close to ideal for alteration. Because of their construction of soft metal, and the fact that there was no clothing or flesh to give problems, the figures are easily altered. The basic skeleton is illustrated on the accompanying instruction page-hand to side, sword raised, jaw open. Not a pretty prospect, but even worse when there are six all alike. You only need your hands to modify these guys-but possibly a small metal ruler or pliers will come in handy to increase your

(Turn to page 60)

The 'degrees of difficulty' and what they mean

This article is an introduction to alteration of miniatures, and covers reanimation and adaptations. The alterations below are defined as they will be used in future columns. They have not been defined exactly this way before. This series of definitions was needed to differentiate a progressive increase in complication of operations, and increasing use of tools and skill. The definitions do not include "putting together" kits, but only changing some aspects of a standard one piece miniature.

CONVERSION: Use of one figure to represent another type of figure. This is normally accomplished by simply painting a figure differently after scraping or filing off some figure details. For example, a head of hair can be filed down and painted silver to produce a helmeted figure.

REANIMATION: Minor alteration of a figure's appearance by bending arms, legs, or equipment into a new position. Minor additions of equipment also fall into this category. Shields, capes, weapons, or other equipment may be easily glued onto the figure without use of complicated operations.

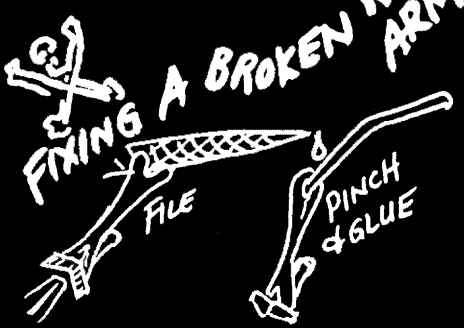
ADAPTATION: Minor additions and changes to a figure made with putty, filler, or solder. Substitution of a head or weapon from another figure that requires drilling and filing also is included. The repairs recommended in the article are similar to adaptations.

MODIFICATION: Major alteration of figure requiring considerable cutting, filing, and grinding. Figures are also modified by cutting off limbs and substituting different ones-often from another figure. This method is sometimes accomplished with an assist from a power tool, or with specialized hand tools, vises, or jigs. The finished figure will be unique, with those items of the original casting that are still visible being overshadowed by modified parts.

SCRATCHBUILT: Rather than an alteration of a figure, this is actually the production of a completely new figure from basic materials. Although some commercially available pieces may be included, the major segments of the figure are constructed by the modeller. Clay, wax, putty, wood, plastic, paper, metal, or other materials are formed and assembled to make a piece specifically for the purposes of the modeller. Scratchbuilding is most often used for a special display piece or a diorama. This is the most demanding type of modeling and the most advanced. It is included here for comparison with alterations, and will be covered in some detail in a later issue of *The Dragon.*

SKULLING

None of this is law. Take these suggestions as a start



GRENADIER SET M-51

Hope you increase your skull skill!

Fantasysmith!

IS USED HERE. OTHERS MAY BE GOOD FOR YOU.

ANOTHER CHAPTER FROM fantasysmith's notebook

Fantasysmith Wings— An award for figure alteration

A new award, *Fantasysmith Wings,* will be given at ORIGINS '80. The award will be for the best alteration of a 25mm standard figure entered into the ORIGINS painting competition. This article describes the award and discusses several examples of figure alteration.

Several excellent alterations of miniature figures were entered in the painting competition of ORIGINS '79. The judges paid scant attention to these alterations, which were truly superb in several instances. Instead, discouraging words were heard. This was too bad, for the craftsmanship and patience required to alter a 25mm standard figure is every bit as valid an art as painting itself. When modelling effort is added to a good casting, and the project is well painted, the results can be astounding.

This writer is determined to reward inventive modellers of 25mm (Fantasy or Ancient) figures. The award will be made for figures that enter the painting competition and meet certain specific conditions.

The award will only be given to individual figures of 25mm Ancient or Fantasy subjects. Human figures will be measured, and must be 25mm plus or minus 3mm from the bottom of their feet to the center of their eyes. Mounted and nonhuman figures will be given special consideration, but must generally conform to 1/72nd scale and the *AD&D Monster Manual.* Awards will be made on the basis of animation, detail, and painting of the final figure with no consideration for the mounting stand, other than that it must conform to the specifications below.

The figure that is to be judged must be painted and mounted on an unadorned pedestal that is 2" high, not longer than 3", and not wider than 1½". Exact shape of the mounting pedestal is not specified, so round, oval, or irregular stands can be used as long as they fit into the allowances for width and length. All stands must be 2" high, however. A small *Ral Partha* shipping box conforms exactly to the specifications, and may be used if desired.

This author suspects that once a figure is placed on a lovely base together with delicate garnishes and sweet little rocks, it is absolutely useless for anything other than "sitting pretty." Hopefully, entries into the competition will eventually be used in wargames or fantasy role-playing games. Other reasons for the mounting base restrictions are: (1) Bases distract from the form and painting of the miniature itself. (2) Elaborate bases take extra skill and time. Some figures seem to receive awards at least partially because of their mountings. This will not be the case for this particular award. (3) New modellers are sometimes deterred from entering competition because they do not have the wherewithal to produce specialty bases. This competition aims at broadening the number of entrants and possible subjects for modelling. Therefore, an austere mounting base is required, since it is the simplest to produce.

A figure altered and mounted like this could be a winner!

The basic castings used as raw material for the final figure must be displayed for comparison. These must be unpainted, but can be given a light wash of any dark color to highlight initial form. Castings must be mounted on a piece of standard corrugated cardboard or similar material. They must stand up, and can be supported by any simple support. Thus, the rider will not lie flat, but will stand near vertical. Equipment or attributes added such as shields, swords, caps, or wings must be individually mounted on a small card and placed near vertical. There is no size limitation to the castings' base, but it should be small enough that both the display piece and the original castings can be observed at a glance.

The trophy will consist of a turned wooden base on which a set of *Ral Partha* wings are mounted. These will be finished in some metallic color. The base will have a plate attached that will identify the award and place of award. This trophy will be on display prior to judging. A *Dragon* subscription will be given with the award. Information to this effect will be present when the award is on display prior to judging.

Entry into this competition will be designated by the entrant who mounts an entry as described above, and does not exclude entrants from other prizes. There is no special fee or entry registration procedure required for consideration. No prize will be given unless at least three competition entrants are displayed. Winning entrant and honorable mentions will be photographed with a macro lens camera for publication. Continuance of this award in future conventions will depend on the reaction and interest of miniature modelers.

fantasysmith's notebook

Alteration in words & pictures

Two examples of alteration are given with this companion article in the form of illustrations with accompanying explanations.

The first drawing shows Fantasysmith's first attempt at alteration: Archive's Ironhoof. An accompanying photograph shows the finished piece together with other Archive centaurs. The drawing is simplified, in that it doesn't give much of an idea of the difficulty of the process. Initial attempts to remove Ironhoof's cape came to naught, and a Dremel motorized tool was eventually required to remove it. Forming and attaching the right arm with lance was a difficult job that required several attempts.

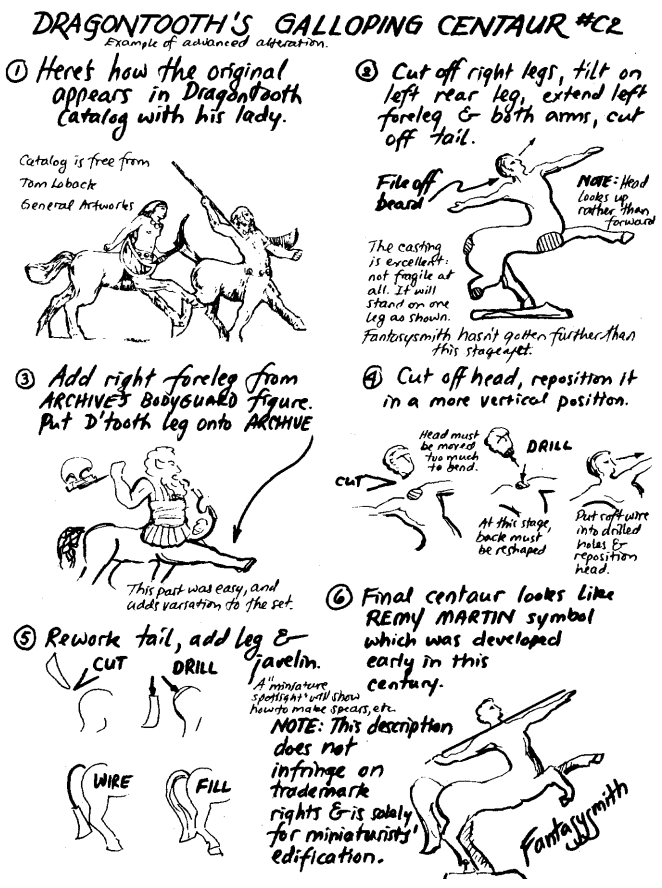
Two conclusions can be drawn from this experience. First, 25mm standard figure alteration is not an easy job. It's difficult and useful only for the advanced modeler who wants to produce something unique. Second, there is really enough variation in today's miniatures to satisfy most painters, and therefore no real need for figure alteration. All figures referred to here are good enough to use in their original form. For instance, the fact that Ironhoofs helmet obscures his face is no criticism. He's wearing a Corinthian helmet, which was the most successful of Greek helmets *because* it protected the entire face. Therefore, the face is obscured. Fantasysmith simply felt that he wanted another pretty face in his collection, and so the helmet was filed away. The Archive casting was chosen in the first place because of its excellent animation and detail. You may wish to modify it differently, or perhaps paint it up as it is.

The second example is of a model of a fine chaotic figure that has long been the insignia of a well-known French firm. This symbol's high status proves that if chaotics stick around long enough, they're acceptable in the best of circles.

Your author is having several problems with the rear right leg. These will eventually be solved, and the figure base coated and painted. But whenever I come up against any problem while making alterations on a figure, I simply stop and let the figure rest for a few days. When I come back to it, I will look at it with a fresh point of view, and perhaps a solution will suggest itself. If no solution is apparent after a bit of thought, the figure goes onto the shelf again, and I do something else. Alteration of anything as small and delicate as a 25mm standard figure cannot really be rushed. It's easy to destroy hours of work in one minute of frustration. Thus, altering of miniatures is an exercise of patience that is far more demanding than painting alone.

It is to reward those who undertake the demanding challenge of alteration of miniatures that the *Fantasysmith Wings* award was conceived. But the award is not intended to persuade anyone into competing for it. ORIGINS has seventeen painting awards already, each of which is a valid recognition of skill. Hopefully, miniature modelers' knowledge and enjoyment of their hobby will be increased by addition of this one further award. If this is the case, the award will have served its purpose.

ARCHIVE'S IRONHOOF (#809)
Example of alteration.
Fantasysmith didn't like IRONHOOF's cape or mace & changed them. The basic casting is well animated & a good start point.
Arm is a bit too large
Face obscured
Shield is large, ornate, and heavy looking
Cape of heavy fur
NOTE: COMMENTS ARE NOT CRITICISMS - SEE TEXT
HEAD & FACE
Cut off horns, file back crest, nose & cheek pieces.
Rework face
BODY & SHIELD
Grind down
Grind off
Cut off tail
CHANGE ARM, MAKE LANCE
FILE
Cut mace & dispose of hand
FILE
Turn mace, drill hole, insert wire, shape lance tip, file side.
VIEW FROM ABOVE
Glue lance to arm. Mace head becomes a counterweight
SIDE VIEW
Build up handguard with green putty
Glue on lance
Drill & reposition tail
Add sword sheath using filler.
A "miniature spotlight" will explain several of the most commonly used fillers.
GIVEN AS AN EXAMPLE OF WHAT CAN BE DONE. FINAL FIGURE SHOWN IN PHOTO WITH OTHER ARCHIVE CENTAURS. HAPPY MODELLING!
WOULD YOU LIKE TO SHARE IDEAS ON ALTERATIONS? SEND 'EM TO
Fantasysmith


DRAGONTOOTH'S GALLOPING CENTAUR #C2
Example of advanced alteration.
① Here's how the original appears in Dragontooth catalog with his lady.
Catalog is free from Tom Lobock General Artworks
② Cut off right legs, tilt on left rear leg, extend left foreleg & both arms, cut off tail.
File off beard
NOTE: Head looks up, rather than forward
The casting is excellent: not fragile at all. It will stand on one leg as shown.
Fantasysmith hasn't gotten further than this stage yet.
③ Add right foreleg from ARCHIVE'S Bodyguard figure. Put D'tooth leg onto ARCHIVE
This part was easy, and adds variation to the set.
④ Cut off head, reposition it in a more vertical position.
Head must be moved too much to bend.
DRILL
CUT
At this stage, back must be reshaped
Put soft wire into drilled holes & reposition head.
⑤ Rework tail, add leg & javelin.
CUT
DRILL
A "miniature spotlight" will show how to make spears, etc.
WIRE
FILL
⑥ Final centaur looks like REMY MARTIN symbol which was developed early in this century.
NOTE: This description does not infringe on trademark rights & is solely for miniaturists' edification.
Fantasysmith

STEPS IN THE PRODUCTION PROCESS

The first step in any process is to choose the goal. Here ARCHIVE casting #615 is developed into a female druid. This is the best figure for a female druid that's on the market. It's nakedness is the only problem; this is covered below. Jantasysmith

BASIC

INTERMEDIATE

ADVANCED

PREPARE: All steps before starting to paint. Great patience is required.

Trim off flash & mold marks with file & knife; smooth all surfaces to be detailed - esp. face.

Alter: Cut off scythe blade & create scimitar by flattening handle with small pliers and patience.

Alter: Add on the gown w/ titanium white or some other medium. Add feet also. (thalidomide birth)

PAINT: These steps need a steady hand.

Prime & Base Coat: Actually two steps, included here as one because of format. This produces a good piece for use in fantasy play without going further in the process. Now you have a colorful piece for gaming.

Shading: Apply darker color and highlights to increase the feeling of depth of the figure and emphasize its three dimensionality. This is one of the hardest steps and is the point where a mere painter becomes an artist.

Super detail: Facial features & expression are finished with exquisite delicacy. Clothing, weapon detail, muscle & hair shading, equipment are also detailed in this step. Only those who are enthralled by miniature painting should try it.

PRESERVE Protect your fantasy work from reality.

Spray preservative such as Testor's Matte Clear Spray Lacquer #1260 & Dullcote. Everyone should do this.

Differential Preservative: Brings out metals, satins, shiny leather, jewels & other shiny or shimmery articles.

Mount for use as a display piece of character figure using specially turned or mitered mounting block.

ANOTHER CHAPTER FROM fantasysmith's notebook

Work in Process:

The systematic way to make finished figures

As with any other demanding effort, modelling and painting miniatures requires concentration and the right mood. Even the best modellers probably do not have this concentration and mood at each session. Sometimes they simply aren't interested in spending an hour or more painting in facial features and super detail on a single 25mm figure. If they were to try this on a bad day, they would produce a mess just as you or I would. Varying capabilities and desire affect everyone. The answer to this problem is pacing your production to your capability and mood by developing a "work in process inventory," and later offering your help to your friends so you can specialize in what you do best.

WHAT IS WORK IN PROCESS?

Work in process (WIP) is found in all standard production industries. It consists of jobs in various stages of completion. This is typical of shops that work at individual jobs—such as an auto repair garage. On a higher level of complexity, production lines are even better examples of WIP.

At any given instant in the J. I. Case Company's tractor plant (Clausen Works) in Racine, Wisconsin, for example, there are motors and vehicles in various stages of assembly, testing, and completion. Workers who make the great machines out of prepared components are specialized in an area which matches their capabilities. They are much more familiar with hard work than with magic, yet by combining their abilities they can produce a benevolent giant that would seem magical to those whose only experience had been with a mule or other draft animal.

The main point is that industry does not generally start a single job and work it to completion all at once. Instead, each worker or work team on the line takes an uncompleted piece and adds to it This addition is up to the limit of the worker or team's capabilities. Then the still uncompleted piece is passed on to the next team.

Nobody tries to get the tractor together in one day. There is always a lot of uncompleted stuff around. This uncompleted product is called "Work in Process" or "Work In Process Inventory," and is just as essential to production as food is to you. Each production process feeds on the partially finished goods of the previous one until the final product is complete. Without the accumulation of partially finished goods, the great factories would become. silent, the dazzling showrooms empty.

By making the work in process method part of your own, substantial benefits might be yours.

WIP HELPS YOUR PAINTING

Each miniaturist should make the best use of existing talents. This is simply good sense—it conserves energy, time, and gives you the greatest potential for accomplishment Your talents, though, are not a constant commodity and can best be described as a varying range of capability. Only after you have started working will you know for sure where in that range you are. Not only does technique increase or decrease with practice or the lack of it, there is a daily variation as your energy fluctuates. By using your best energy for the most demanding jobs, you will be most likely to create the most attractive miniatures.

''WIP" will let you tailor your work load at any working session to the time, energy, and control you have at that particular instant. By breaking down the process into several steps, you bring modelling into a more manageable state. The finished miniature is thus seen as the culmination of several operations rather than something that *must* be finished completely at any one sitting. Using WIP, you'll always have pieces in various stages of completion, and can work at exactly the level you feel most capable of. Your WIP inventory will not only let you tailor your work to the skill at hand, but also to the time available. If you have only a short time, and can't begin the really heavy stuff, you can just do some of the easier things.

Levels of difficulty, as defined in a chart that accompanies this article, are conversational guides only. They are presented as an example of how fantasy miniaturists can differentiate their daily capability as well as their basic skill. Each modeller must define his own capabilities personally rather than relying on a tool such as the guide. But definitions given here are good for starters. They help give you an idea of what kind of steps the process of modelling could be broken into, and what levels of competence are necessary. This, in turn, indicates what could comprise a WIP inventory for a fantasy miniaturist.

Before this WIP thing takes a life of its own and chokes off your creativity, a last comment should be made on the concept. WIP is designed to assist production. If it doesn't fit your mood, there is no reason *not* to finish off several pieces in a single sitting. Remember—the object is to use the figures in gaming or display, not to develop a compli-

(Turn to page 55)

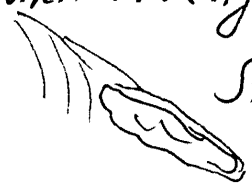
Skill Level	Experience, Practice	Previous Production (figures)	Expected Result
BEGINNER (1-4)	a little or none	none	Good enough for gaming
AVERAGE (3-6)	a few months	8-20	Remarkable gaming figures
CRAFTSMAN (5-7)	several months	21-50	Should be entered in miniature modelling/ painting competitions.
EXPERT (6-8)	one or two. years.	51-80	Gets honorable mention in competitions
MASTER (9-10)	several years	80+	Several competition wins.

The Miniature Spotlight

FILLERS

ANN HYKE of Milwaukee WISC. wants to know how to fill the holes that may mar even the best castings. The stuff under the spot is useful when you have a hole to fill & the hole is on a miniature.

A. PLASTIC WOOD (Boyle Midway Inc., N.Y.) For big holes or when making alterations:



Stuff it in - it will shrink when it dries

Smooth out only after it has dried a day. Use a small sanding block & fine sandpaper.

B. SQUADRON GREEN PUTTY (Squadron, Hazel Park, Mich.)

① Method

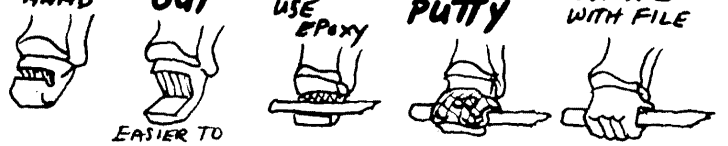
Rough up hole w/ file

Use a toothpick to add putty ~

It will be hard to get it to stay where you want it.

With practice, you'll have less trouble getting it to stay. After the putty is about where you want it, let it half dry, then shape it. File only after a day.

② Standard Additions → such as weapons, wands, staffs.



③ Filling a Larger Hole

Putty takes 30 min or longer to set up. Before setting, it will run.

Cut off the drip w/ knife after it dries & file the entire surface smooth.

Then put in more putty. You may need to do this several times.

TAKE YOUR TIME! Be patient & let it dry a day before sanding or filing. It can foul your file!

Ann in one of her many disguises:

IS THERE A HOLE IN YOUR TECHNIQUE? FILL w/ → Fantasysmith 1980